

Public Health Starts Here.

April-May 2004

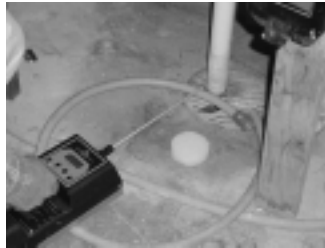
The P2 Corner

Healthy Workplace, Healthy Workers

The quality of a business's indoor air affects the quality of the work done in that business. An increasing cause of sick day use and worker's compensation claims is the air that workers breathe every day. If the air is "sick," the workers will become sick. The owner will suffer lost productivity and the added expenses of paying for overtime, part-time temporary workers, or worker's compensation claims in some situations.

Poor indoor air quality can be caused by Sick Building Syndrome. Sick Building Syndrome can be traced to any number of causes: poor air ventilation or filtration, materials in the building, mold, or smoke. Poor ventilation allows stale air or pollutants to remain trapped in a building. Often workers breathe the same air over and over. This condition shares diseases as well as pollutants.

Poor filtration is related to poor ventilation. Many buildings with central air conditioning or heating systems filter the air to remove pollutants and toxins from entering the building or clean the air as it circulates around the building. If the filters are not changed frequently or if the system is not adequate to the needs of the building, the system will not work properly. Pollutants and toxins can become trapped in the filter only to be gradually released in to the air again.



Sometimes building materials will make workers ill. Some workers will be sensitive to certain materials. Some materials are more likely than others to become moldy. Some materials will break apart over time, releasing harmful particles into the building's air. New materials such as wall coverings and carpets, as well as some furniture, can give off toxic fumes (off gas). This action will continue until the materials have sufficiently aged or all the harmful gases have been released.



Mold, caused by moisture and poor ventilation, usually grows in areas that are constantly damp or that have been flooded. Leaking roofs and pipes can encourage mold growth. Mold can grow between walls, in ceilings, and under carpets. If moisture is a recurring problem, this hidden mold might grow for months before it is discovered and cleaned up.

Smoke causes many health problems and is a major reason people take sick days off. Smoke can come from poorly operating combustion sources (stoves, furnaces, burners). A major smoke source is tobacco smoke. Nonsmokers who work in a smoking environment will inhale smoke, much as a smoker will. Workers who smoke or who are exposed to smoke are more likely to become ill from other indoor air problems.

To reduce costs and boost productivity, make sure your work environment has healthy air. Reduce sick days, healthcare costs, and worker compensation costs. Healthy air means healthy workers.



Please circulate this issue among your staff and coworkers.

HELP Your Business Campaign

HARRY HEAFER, ENVIRONMENTAL PUBLIC HEALTH EDUCATOR II

Get active . . . get involved. That's the charge this spring as businesses, residents, and organizations create a clean sweep of Lincoln and Lancaster County. The local effort is part of Keep America Beautiful's Great American Cleanup™, the nation's largest annual community improvement program. Several school groups, clubs and neighborhood associations are becoming involved to help keep Lincoln and Lancaster County clean.



Weeds and trash create a negative impression of your business.

Last year in Lancaster County, 5750 volunteers completed 333 litter cleanup and beautification projects putting in nearly 20,000 volunteer hours. This year we hope to improve on that performance as Keep Lincoln & Lancaster County Beautiful volunteers complete various cleanup and beautification projects.

The Great American Cleanup™ also encourages businesses to become involved and help keep your business clean too. Look around your parking lot and landscaping each day when you arrive at work. Take time to look out on the public side as well, as if you were a customer approaching your business.

"The Great American Cleanup is a powerful catalyst for changing behaviors and educating people on the importance of taking care of communities through volunteer participation," said G. Raymond Empson, president of Keep America Beautiful, Inc. "It's everyone's responsibility to keep our country clean and beautiful. The Great American Cleanup creates a ripple effect: Activities that take place this spring can encourage people to develop a commitment to take care of their communities year-round."

Do you see any litter? Not only is trash unsightly, it creates a negative image of your business and can result

in a loss of business. Do you have proper trash containers in your parking lot: ones with lids or at least covers so the wind can't suck out the trash? Do you have a cigarette butt receptacle at the entrance to your business? Keeping the outside premises of your business clean of litter shows pride in your community and in your business. Having employees do a quick walk through of your outside space a few times a day to pick up any loose litter will take a minimum amount of time but shows that you care about how your business and Lincoln look. And keep in mind that city ordinance requires all property owners to keep their property free of litter.

National support for Keep America Beautiful's Great American Cleanup™ is expanding. This year's National Sponsors are AT&T Wireless, Firestone Tire & Service Centers, ExpertTire, Tires Plus, Georgia-Pacific Corp. (the makers of SPARKLE® Paper Towels), LYSOL® Brand Products, MOTRIN® IB, Pepsi-Cola Company, Ruffies® Trash Bags, Waste Management,

Inc., Wm. Wrigley Jr. Company, Yard-Man by MTD. Retail Sponsors are Ahold U.S.A., Hy-Vee, Inc., and The Kroger Co.. The Media Sponsor is

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A clean, attractive campus invites more business.

Partner is Rubber Manufacturers Association.

The Keep Lincoln & Lancaster County Beautiful program has a brochure to help you examine your business to identify sources of litter and how it is handled. To request a free copy, please call 441-8035.



EPA Welcomes New SmartWay Partners, Announces Emissions Calculation Tool

The following article is adapted from an EPA announcement recently sent to select agencies. The program and service described in this article pertain mainly to fleet managers. In past issues of The ETHIC, we have outlined some ways that fleet managers can reduce waste and hazardous air emissions. The SmartWay Transport Partnership and the Emissions Calculations Tool provide additional guidance and assistance to over the road transportations industry.

Thirty-seven new freight industry partners have joined EPA's SmartWay Transport Partnership, bringing the total number of partners in the program to 52. SmartWay Transport is a voluntary partnership between freight industry sectors and EPA that establishes incentives for fuel efficiency improvements and greenhouse gas emissions reductions. The program helps support the voluntary 18 percent greenhouse gas emissions intensity reduction goal set by President Bush in February of 2002.



By 2012, the initiative aims to reduce up to 200,000 tons of nitrogen oxide emissions and 33-66 million metric tons of carbon dioxide emissions per year, while saving up to 150 million barrels of oil annually.

The SmartWay Transport Partnership challenges companies to add innovative fuel saving strategies to their fleets such as reducing unnecessary engine idling; using improved aerodynamics, tires, and lubes; and increasing the efficiency and use of rail and intermodal operations.

EPA Administrator Mike Leavitt welcomed the new partners earlier this month at the American Trucking Association's Annual Leadership Conference in Washington, DC. A complete list of partners is available at <http://www.epa.gov/smartway/partners.htm>.

Emissions Calculation Tool



EPA has developed a user-friendly spreadsheet based tool, the FLEET Performance Model, to help partners calculate fuel efficiency, carbon efficiency, and emission reductions from

a variety of voluntary actions covered under the SmartWay Transport program. The model is available at http://www.epa.gov/smartway/smartway_fleets_software.htm.

For information on EPA's FLEET Performance Model contact Matt Payne at (734) 214-4576 or payne.matthew@epa.gov.

For more information about the SmartWay Transport Partnership, visit <http://www.epa.gov/smartway/>.

State and local officials interested in additional information about improving air quality, increasing energy efficiency, saving costs and voluntary greenhouse gas reductions may visit <http://www.epa.gov/globalwarming/visitorcenter/publicofficials/>.



A Brief History of US Pollution Prevention

Modified from an article in the National Pollution Prevention Roundtable's periodical P2Post

1969-1970s: Congress enacts major environmental laws such as the Clean Water Act, the Clean Air Act, and the Resource Conservation and Recovery Act (RCRA). Each focused on one

media (air or water), but all were "end of pipe"—dealing with waste at the end of a process.

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HISTORY (CONTINUED FROM PAGE 3)

- 1970: President Nixon and Congress create the United States Environmental Protection Agency (EPA).
- 1975: Business leads the way when 3M creates the Pollution Prevention Pays Program (3P). This is the first company-wide P2 program that documented results.
- 1979: M. G. Royston published *Pollution Prevention Pays*. This book promoted the idea that preventing pollution was better than controlling it or dealing with it after it is created.
- 1985: INFORM publishes a study on Cutting Chemical Wastes, identifying potential reductions for 29 chemical facilities.
- 1986: The Congressional Office of Technology Assessment (OTA) releases "Serious Reduction of Hazardous Waste," a report written by Joel Hirshorn and Kirsten Oldenberg.
- 1990: The Pollution Prevention Act (PPA), signed in October by President Bush, names P2 as the top environmental behavior and establishes seed money for state and federal P2 efforts.
- 1994: EPA launches the Common Sense Initiative.
- 2000: Senator Frank Lautenberg introduces the "Streamlined Reporting and Pollution Prevention Act," which consolidates reporting responsibilities and ensures P2 technical assistance is available for reporting companies.

P2 is based on the 3-Rs: Reduce, Reuse, and Recycle. The first goal is to reduce the quantity or the hazard posed by materials used or discarded. Businesses can reduce by purchasing smaller amounts of hazardous materials or "just in time" purchasing: buying a product just before it is need.

Businesses in and near Lancaster County have taken significant steps to reduce harmful air emissions and to help others reduce emissions. Some examples are:

Bruning Grain and Feed in Bruning, Nebraska, makes a soy oil that can be used in place of petroleum-based lubricants.

General Dynamics used trichloroethylene, a halogenated solvent, to degrease aluminum

parts. These emissions made the facility subject to the EPA's halogenated solvent degreaser MACT (maximum achievable control technology) standard. The company converted to n-Propyl Bromide which is not regulated by the MACT standard. This choice was made, in part, because there was no need to replace equipment. The cleaning aspects of the new material are the same as the old, more hazardous material.

Telex reduced the emissions of styrene from the manufacture of speaker horns by converting to HVLP spray guns and improving spray application techniques. Emissions were reduced from 176 pounds per ton of resin applied to the surface to 86 pounds per ton.

Reuse is simply using something over again. Capturing fugitive product that otherwise would go to waste (in the air or in the trash) and putting it back into the process is one example of reuse. So is using a pallet on which materials were delivered to your shop to send materials to a customer. Reuse includes cleaning product barrels and using them to hold new product or other materials.

We are all familiar with the concept of recycling. In some cases, such as oil, solvents, and mercury, recycling is the only real option to disposal.

P2 gives businesses the choice in how to comply with environmental regulations. Many of the P2 options take businesses out of the need for permits.



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For more information or for P2 technical assistance, call 441-8040.

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